



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,673	06/24/2003	Kuniaki Kurihara	239286US6	8402
22850	7590	11/24/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SMITH, CREIGHTON H	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/601,673	KURIHARA, KUNIAKI
	Examiner	Art Unit
	Creighton H. Smith	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) ____ is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-14 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 11.23.05.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

Claims 6 & 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's use of the "and/or" phrase in these claims renders them vague indefinite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-9, 11-14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Krasner et al '541.

Step 201 of Krasner discloses a Base Station (BS) transmitting a signal to a mobile station. Step 207 discloses the mobile station transmitting back to the BS a signal indicating the mobile station's position. In Step 153, Krasner et al disclose computing a propagation delay between the mobile and BS, and the propagation delay is defined in col. 4, lines 45-47, as the "range" between BS and MS divided by the speed of light. Krasner's use of the term "range" reads upon applicant's recital of "distance". Range and distance are one and the same. Additionally, Krasner et al disclose in col. 5, lines 40-49, that the propagation delay is determined by the position of the mobile (via GPS signals) and the position of the BS. "The distance between the two divided by the speed of light will determine the propagation delay." Figure 8 shows frames of a

predetermined period. Krasner et al meet applicant's recital of the mobile terminal returning a response signal to BS "after a lapse of a predetermined period" because it will take predetermined period of time from when the mobile terminal receives the BS's ranging signal until the mobile terminal can respond to the ranging signal by sending out a response signal. The lapse of the predetermined period of time takes into account the time it takes to process the ranging signal from the BS and return the response signal from the mobile terminal back to the BS.

For claim 11, see col. 11, lines 30-40 of Krasner et al

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krasner et al in view of McCrady et al, U.S. Patent Publication #2001/0053699, now U.S. patent #6801782.

McCrady et al disclose in [0029] a two-way, round-trip ranging signal where the time of arrival of the ranging signals will determine the range estimate used to calculate the position of a mobile terminal. A master radio transmits outbound ranging pulseS to plural radios which respond by transmitting reply ranging pulses that indicate location of the radio. To have provided McCrady et al teaching of plural outbound pulses in their

wireless ranging scheme in Krasner et al wireless ranging scheme would have been obvious to a person having ordinary skill in the art.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stilip et al '290 is cited to disclose multi-path reflection elimination.

Any inquiry concerning this communication should be directed to Creighton H. Smith at telephone number 571/272-7546.

17 NOV '06


Creighton H Smith
Primary Examiner
Art Unit 2614